

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

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- A<sup>1</sup>
- 1        1. (Currently amended) A method for setting a new reference value for  
2        managing bi-directional relationships between objects in an object model, the  
3        method comprising the steps of:  
4            receiving bi-directional relationship information indicating interrelation  
5        between objects having one or more bi-directional relationships;  
6            creating proxy objects based on the bi-directional relationship information  
7        for selected bi-directional relationship objects having bi-directional relationships,  
8        wherein the proxy objects have knowledge regarding a host object to which it  
9        belongs and one of more peer objects with which the host relates through a  
10       bidirectional relationship;  
11            receiving a new ~~reference~~ peer value to be set in a selected object relating  
12       to a bi-directional relationship;  
13            determining, using one or more of the proxy objects, a new peer value to  
14       be set for a peer object which has the bi-directional relationship with the selected  
15       object; and  
16            setting the new peer value ~~to~~ in a proxy object created for the peer object  
17       so that an associated new peer object has a bidirectional relationship with the peer  
18       object without a developer of the object model having to ensure all associated  
19       references are maintained.

1     ~~2.~~ 2. (Original) The method as claimed in claim 1, wherein the bi-directional  
2 relationship information receiving step comprises the steps of:  
3         receiving object model meta-data defining relationships between objects in  
4 the object model; and  
5         retrieving reference value information that represents reference values  
6 indicating current peer objects for the bi-directional relationships.


1     ~~3.~~ 3. (Original) The method as claimed in claim 1, wherein the bi-directional  
2 relationship information receiving step receives the reference value information  
3 from a data storage in which data corresponding to the objects is stored.


1     ~~4.~~ 4. (Original) The method as claimed in claim 1, wherein the bi-directional  
2 relationship information receiving step receives the reference value information  
3 from a new object that is newly created by a user.


1     ~~5.~~ 5. (Original) The method as claimed in claim 1, wherein the bi-directional  
2 relationship information receiving step receives the reference value information  
3 that includes a collection of reference values for a bi-directional relationship  
4 object which references many peer objects.


1     ~~6.~~ 6. (Currently amended) The method as claimed in claim 1, wherein the  
2 proxy object creating step creates proxy objects at-of uni-directional peer  
3 relationships that combined comprise bi-directional relationships.


1     ~~7.~~ 7. (Original) The method as claimed in claim 6, wherein the proxy object  
2 creating step creates a proxy object for each of a pair of one-to-one uni-directional  
3 peer relationships that form a one-to-one bi-directional relationship.


1      8. (Original) The method as claimed in claim 6, wherein the proxy object  
2     creating step creates a proxy object for each of a one-to-many uni-directional peer  
3     relationship and one-to-one uni-directional peer relationships that form a one-to-  
4     many bi-directional relationship.


1      9. (Original) The method as claimed in claim 6, wherein the proxy object  
2     creating step creates a proxy object for each of uni-directional one-to-many peer  
3     relationships that form a many-to-many bi-directional relationship.

1      10. (Original) The method as claimed in claim 1, wherein the new peer  
2     value determining step comprises a step of passing the new reference value  
3     through related proxy objects that are related to the bi-directional relationship.

1      11. (Original) The method as claimed in claim 1, wherein the new peer  
2     value contains a collection of reference values which is determined based on the  
3     new reference value.

1      12. (Original) The method as claimed in claim 1, wherein the new  
2     reference value represents addition, removal or change of a reference value.

1      13. (Original) The method as claimed in claim 1, wherein the setting step  
2     sets a value null when the determining step determines to remove the bi-  
3     directional relationship.

1      14. (Original) The method as claimed in claim 1, wherein the setting step  
2     sets a new peer value by replacing an old reference value with the new peer value.

1     — 15. (Original) The method as claimed in claim 1, further comprising steps  
2 of:  
3         determining, using one or more of the proxy objects, another new peer  
4 value to be set in a new peer object which is referenced by the new reference  
5 value set for the selected object; and  
6         setting another new peer value to a proxy object created for the new peer  
7 object.

A<sup>1</sup>  
1     — 16. (Original) The method as claimed in claim 1, further comprising steps  
2 of:  
3         determining, using one or more of the proxy objects, an updating reference  
4 value for a related object that is related to the selected object through one or more  
5 original or new bi-directional relationships; and  
6         setting the updating reference value in a proxy object created for the  
7 related object.

1         17. (Original) The method as claimed in claim 16, wherein the updating  
2 reference value determining step and the updating reference value setting step are  
3 repeated for all related objects so as to maintain bi-directional relationship  
4 integrity.

1         18. (Original) The method as claimed in claim 16, wherein the updating  
2 reference value determining step comprises a step of passing the new reference  
3 value through related proxy objects that are created for the related objects.

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1         19-50. (Canceled).